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199 Walnut

Cynanche Trachealis.

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Cynanche Trachealis, or Croup. -

An inflammation of the mucous membrane of the trachea and larynx has been denominated croup. The vessels of the part, in this disease, instead of throwing out an increased quantity of mucous, are excited so high as to produce coagulable lymph. -- Not only the trachea and larynx are affected in this disease, but the inflammation extends to the ramifications of the bronchia and lungs, from which, there is an exudation of a puriform nature. There is a peculiar sound attending inspiration in this disease - it is a sonorous wheezing compared by some to the crowing of a cock; there is also a stridulous sound in coughing, and speaking - great difficulty in respiration, thirst, febrile symptoms, and some spasmodic affections of the parts involved -

The disease has been divided by some into two kinds; the primary or idiopathic. When it is seated primarily in the trachea, bronchia, and surface of the lungs; symptomatic when it occurs as the consequence of some previous disease such as Measels, Scarlatina &c. --

Diagnostics. Croup may be confounded with acute Asthma, but by the following symptoms we can generally distinguish them. In Croup there is seldom any remission, which generally occurs in Asthma: there is in Asthma very little cough: in croup the voice shrill and small, the pulse full and strong, urine high coloured. In Asthma the urine is limpid, the voice croaking. --

The inflammation in this disease must be peculiar, for there is generally a concretion on the surface of the Trachea which would be very common, if it were a consequence of

every inflammation of these parts. - That there is a Membrane formed in this inflammation, cannot be denied, for Dr Physick has presented the "Wistar Museum" with a specimen of the kind. The matter of which this substance is formed, possesses different properties from those of Mucous, or from that matter which is thrown out in common inflammations of the mucous membrane; and can only be accounted for as was by Dr Hunter, that is, it is not a secretion from the mucous glands, but that it is thrown out by the exhalent arteries, similar to an effusion thrown out in inflammation of other internal mucous membranes - - -

The new membrane which is formed in Croup, is generally considered to be composed of nothing but coagulable lymph -

Croup sometimes prevails epidemically, yet

it is never contagious: some families are more liable to it than others, - a child having been attacked with it once, is more obnoxious to attacks of it afterwards, but they are not so severe in general. - -

Children from one to ten years of age appear to be most subject to it, yet those who are older are not exempt from it; - it seldom attacks persons after they arrive at the age of puberty -

Causes. - Cold is the cause which generally produces this disease, and it is, consequently, most frequent of occurrence in the Winter and Spring, when the atmosphere is loaded with moisture and the transition from heat to cold greatest - - -

A while before the attack comes on, the child appears drowsy, inactive and fretful, the eyes are suffused and heavy, there is a cough, attended with a peculiar shrill sound;

and this in the course of two days becomes very violent and troublesome; the fits of coughing agitate the patient very much, the face is flushed and swelled, a general shivering takes place; at the close of each fit there is a kind of convulsive effort to renew respiration — as the disease advances, the difficulty of breathing increases: there is inflammation and swelling of the tonsils, the head is thrown back in the agony of attempting to escape suffocation; respiration is accompanied with a peculiar hissing sound, similar to that produced by drawing up the pistern in a dry pump: — the cough is generally dry, but sometimes there is spit up a purulent matter apparently consisting of membrane. — There is great restlessness, thirst, a sense of ~~xxxx~~ heat over the whole body, and frequency of pulse; — there is sometimes remissions

8

and exacerbations of these symptoms---

Prognosis.- Croup is a very dangerous disease, and will sometimes destroy the child quickly by suffocation, either by a spasmodic affection of Glotis, or by a quantity of matter blocking up the Bronchia.- But when it terminates in health, the inflammation terminates by resolution, the spasms cease, respiration becomes more free, the expectoration becomes copious and easy, the voice assumes its natural sound, and the membrane that was formed on the Trachea is gradually dissolved.- 3

But the unfavourable symptoms are, considerable difficulty in breathing, great anxiety, frequent fits of coughing, no expectoration, violent fever, the pulse becoming irregular and intermitting.---

The duration of the disease is various; sometimes it terminates fatally in twenty four

hours, but generally, when it proves fatal, it is protracted to the third or fourth day... It is estimated that one half of the cases prove fatal; the younger the patient, the greater the danger of death. - - - - -

The appearances exhibited on dissection are as follow, as noticed by those whose opportunities of judging have been ample.. Sometimes the lungs are in a healthy state, but more frequently they manifest marks of inflammation. Sometimes there are adhesions to the Pleura; sometimes the air cells are filled with dark gramous blood, - at other times pus is found in them: The upper part of the Trachea is found to be most generally affected. - -

From the appearances on dissection, and symptoms attending the disease, it is obvious that there is an inflammation of the

mucous membrane of the Trachea, Larynx and Bronchia, and a spasmodic affection of the parts. - - -

Treatment.

Bleeding, Emetics, Purgatives and blistering constitute the basis of the curative means in this disease. - - - The first thing then to be done, is, to take away blood from the arm or jugular vein, according to the age and habit of the patient; and it will be found productive of most benefit when carried almost ad deliquium animi. When the symptoms are violent, should the difficulty of breathing and other distressing symptoms continue, unrelieved, we should resort to the lancet again, and afterwards apply leeches to the skin immediately over the trachea.

General and local bleeding are the greatest means of relief, and without it few cases

of Croup can be cured. A neglect of copious depletion with the lancet would be highly culpable in us. Yet the importance of this measure some have attempted to depreciate, and substitute laudanum or tincture of opium in its stead, and supposed this would be as apt to give relief as venesection, but I think this was merely an hypothesis not confirmed by subsequent experience, for there are but very few practitioners who do not give the preference to phlebotomy at the present day --

A prompt and decided antiphlogystic plan of treatment in the commencement of Croup, ought never to be neglected, and especially, copious blood-letting; for by pursuing this plan so far as to reduce arterial action generally, and on the surface of the Trachea, so as to prevent the vessels of the part from throwing that exudation which is common

to the disease, (whether it consist of an effusion of coagulable lymph or mucous) and thus obviate the adventitious membrane from forming, will be surmounting more than one half of the difficulty in the cure of this complaint; but it is only at the commencement of the attack that we can expect to accomplish this.----

After we have premised bleeding, both general and local, and the disease continues obstinate, it will be necessary to apply a blister over the greater part of the throat, and a discharge should be kept up from this, by dressing it with the sabine ointment.---

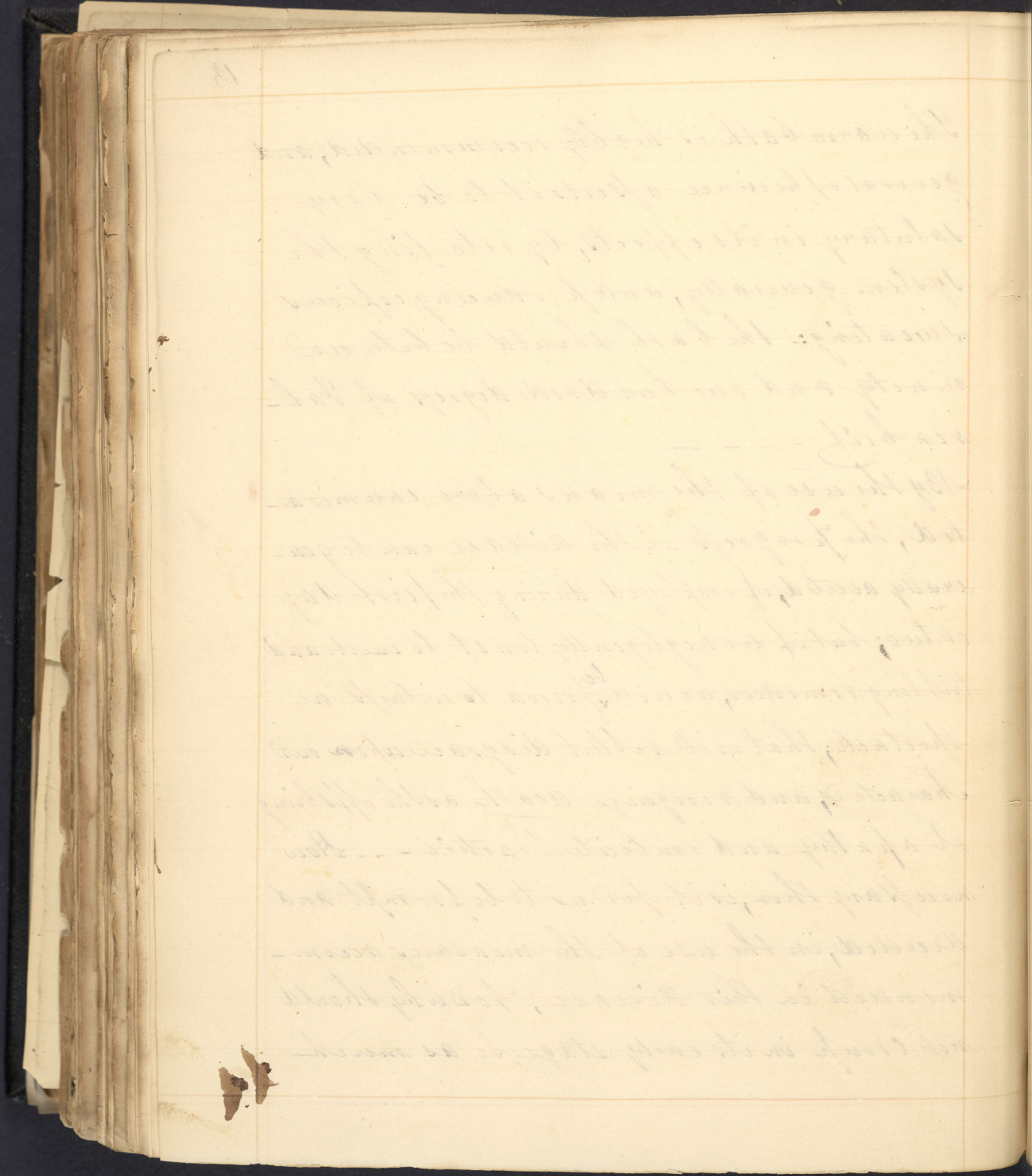
Having kept these steps, it will be important in the next place to administer an emetic; and of these, the best are tartarised antimony, and Ipecacuanha, in a dose agreeing with the age of the child and sufficient to

produce copious vomiting;- this will be found to give great relief by throwing off a quantity of ropy mucous. - -
It will be beneficial to attend to position. the child will be more easy, and rest better, in an erect position; and it will also prevent suffocation - -
Throughout the whole course of the complaint the strictest antiphlogistic regimen must be enforced on the patient, and the bowels should be kept in a relaxed state by the frequent exhibition of purgatives. -
When the intestines are in an inactive state and bound up, the more active cathartics should be given, and for this purpose the submuriate of mercury or Calomel will be found an excellent medicine, either alone or in combination with other cathartics, such as jalap, rhubarb &c. in dose.

prove nata; in general it is necessary to make a pretty decided effect on the bowells.-
The operation of the purgatives unless active, should be assisted by occasionally administering clysters.-
To determine the skin and produce diaphoresis, a solution of tartarized antimony, or small doses of ipecacuanha, given every two or three hours.---
It has been proposed to excite nausea, for the purpose of obtaining a more decided diaphoresis, and it may be beneficial by producing a relaxation of the trachea and larynx; but if given in smaller doses it will determine to the surface of the lungs, renaed expectoration more easy and copious, and it will also produce mild diaphoresis without distressing the stomach---

The warm bath is highly recommended, and general experience asserts it to be very salutary in its effects, by relaxing the system generally, and producing copious sweating:- the bath should be between ninety and one hundred degrees of Fahrenheit - - -

By the use of the means above enumerated, the progress of the disease can be generally arrested, if employed during the first day or two; but if we negligently trust to inert and trifling remedies, we will be forced to witness a spectacle, that will reflect disgrace upon our character, and recognize death as the offspring of apathy and imbecile practice - - - How necessary then, is it for us to be prompt and decided, in the use of the measures recommended in this disease, for why should not croup in its early stage, be as much



under the control of copious bleeding, purgatives and emetics, as most other inflammations? — —

There is generally in this disease throughout its course, a lodgment of mucous or lymph in the trachea, which if it were permitted to remain, would form into a membrane; consequently, it will be highly necessary to administer an emetic once or twice a day, to obviate such a tendency, and for this purpose tartar emetic, or Dr Cole's hive syrup, would be very appropriate, as it has, united in itself, all the properties of an emetic and purgative, and also determines to the surface of the body. — the dose is from ten drops to a teaspoonfull, according to the age of the patient, and violence of symptoms. —

Digitalis has been recommended as a

remedy in this complaint, and it may prove serviceable, as it has a tendency to reduce arterial action, and is thought to possess some antispasmodic effect: the dose for children is found of five drops, repeated according to circumstances.

It is proposed to inhale the vapour of æther mixed with warm water, to reduce spasm and increase expectoration. -- The submuriate of mercury, given in doses sufficient to vomit tolerably free, has a very salutary effect, and some think it acts almost specifically in this disease. -

Some have recommended the employment of mercury so as to produce salivation; as if croup was a disease of duration; but how very few are the cases of croup, that would not terminate fatally before a salivation could be produced, if this remedy

resorted to the exclusion of others more instant in their operation. - The justly celebrated Dr Rush recommended the submuriate of mercury in this disease, but it is generally believed now, that it is productive of no great utility, except when it has an emetic or purgative effect. -

Dr Hamilton informs us, that he has never used the submuriate of mercury in any case, before the lividness of the lips came on: that it did not prove successful, his mode of administration was, to place the patient in a bath of warm water about ninety six degrees Fahrenheit, and give the calomel in doses of from one to five grains, prove nata, every hour or two, untill the respiration became easy; I suspect however, that the warm bath was productive of more benefit than the mercury, in this case; there is no doubt

but that mercury would be a good remedy in Croup, if its own action could be established, previous to the termination of the disease: and certainly it should be given so as to co-operate with other remedies directly anti-phlogystic? — — — —

When the child is likely to be overcome by suffocation, we should administer a stimulatory, such as strong tobacco snuff, and introduce it into the nostrils by means of a quill, or give an emetic that is very prompt in its action, as the sulphate of zinc or copper, or inject a solution of tartar emetic into a vein. — —

When copious depletion by bleeding, both general and local, by purging and puking, and blisters, have been premised, and the inflammatory action subsided, and the disease owing its existence to a spasmodic

affection of the parts, we may administer opium or laudanum, alone or combined with Ipecacuanha, in such doses as the age of the patient will admit---

The operation of Tracheotomy has been proposed.- When every other means have failed and this becomes necessary, it is recommended to make the incision between the thyroid and cricoid cartilages, in that membraneous space which exists there; and afterwards to introduce the handle of the knife, and turn it round, so as to separate the edges of the wound; but when it is necessary to make the opening more permanent, the incision should be a crucial one, and the four angles cut off; or a tube of silver or common quill cut so as to make a free opening through it, and its edges should be coated with sealing wax so as to prevent it from irritating the trachea;

to which tube or quill should be attached straps of linen, for the purpose of passing round the neck, and confining the tube in the orifice made in the trachea. - - -
But this operation very often fails, and in fact seldom succeeds, though performed under judicious circumstances, and by the most skillful surgeons. - - - -

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